Health

ELDERLY RESIDENTS IN ONTARIO

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ELDERLY RESIDENTS IN ONTARIO:

THEIR HEALTH STATUS AND USE OF THE HEALTH CARE SYSTEM

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Arlene Hoffman, Ph.D.
Research Consultant

SUMMARY

In this report the 846 persons interviewed for the USCO survey are described in terms of their health status and use of the health system.

The majority (61%) of the respondents considered themselves to be in good to excellent health and most (56%) felt that their health had remained the same over a five year period. Men rated their health better than women and persons under the age of 75 rated their health better than persons 85 and over. Reports of deterioration in health were more common among women and among persons 85+.

Despite the fact that the majority of respondents perceived themselves to be in relatively "good" health, 61% of the respondents reported they had health conditions that interfered with their daily activities. The proportion of persons reporting interfering health conditions was greater among older respondents (85+) than among the younger respondents (62-74).

The respondents reported an average of three to four health conditions and an average of one to two interfering conditions. Ninety-three percent of the respondents reported at least one condition and 71% of the respondents reported at least one interfering condition.

In light of the number of respondents who reported that they had interfering health conditions, it was significant to find that over 31% of the respondents reported disabilities related to their performance of Activities of Daily Living (ADLS). The two ADLS for which the largest number of respondents reported disabilities were housework and shopping. Nine percent of the respondents had disabilities with personal care activities such as dressing, bathing, grooming and getting in and out of bed. Women reported a larger number of disabilities than men. Thirteen percent of the women compared to seven percent of the men reported three or more disabilities. As well, the older the respondents were the greater the number of disabilities they reported.

Noteworthy were the findings that 20% of the respondents who reported disabilities and one percent of the persons who had disabilities related to personal care activities received no assistance. Additionally, almost two-thirds of the persons who had interfering health conditions received no assistance.

With the finding that most (69%) of the respondents had no disabilities, it was not surprising to find that the majority of respondents were fully mobile. Ninety-one percent of the respondents indicated they could walk around an average block and almost all of these individuals said they required no assistance.

In light of the respondents' health status, an examination was made of the respondents' use of the health care system, specifically, visits with family physicians and medical specialists, hospitalization and use of community agencies.

Ninety-five percent of the respondents reported having a family physician and 92% of these individuals had seen their physician within the 12 month period prior to the interview. The mean number of physician visits over the year was six. Significant differences across age groups were found with respect to the number of times the respondents had been seen by their family doctor. With increasing age the number of visits to family doctors increased. Significant differences in visits to family physicians were also found by sex. Women saw their physician a greater number of times than did men. Sixty-five percent of the women compared to 56% of the men saw their physicians four or more times during the year.

Forty percent of the respondents had been seen by a medical specialist over a twelve month period. Respondents residing in the largest urban centres were more likely to have been seen by a specialist than respondents in the rural areas. No significant differences were found by age or sex with respect to whether the respondents were seen by a specialist or the number of times the specialists were seen.

During the twelve month period preceding the interview, nineteen percent of the respondents had been hospitalized. Their average length of stay was 24 days. Over two-thirds of those hospitalized had been admitted one time. The most frequent reasons for the first hospitalization were surgery, heart related ailments, and tests. Increasing age was associated with a greater likelihood of being hospitalized.

Eleven percent of the respondents used community agencies including visiting nurses, Red Cross Homemakers, Home Care, Meals on Wheels, and Friendly Visiting. The most frequently used agencies were visiting nurses and Red Cross Homemakers. The older the respondents were the more likely they were to use the community agencies.

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1. INTRODUCTION

This paper is part of a series on the findings of the United Senior Citizens of Ontario survey[1]. The principal objective of the survey was to systematically examine the living situation of elderly persons who reside in the community and outside of institutional settings. In this survey a scientific random sample of 846 persons was interviewed from eight areas across the Province. These areas include five urban centres: Brockville, Penetanguishene, Sault Ste. Marie, Toronto and Windsor, and three rural communities: Athens, Bruce Mines and Cookstown.

This report is devoted to an understanding of the respondents' health status and use of the health care system. The information presented is derived from face-to-face interviews and is based on self-reports.

2. HEALTH STATUS

Health status is a multi-dimensional concept and for purposes of this study it was measured by seven variables including:

a) subjective rating of health
b) comparison of health with five years previous
c) extent to which health conditions stand in the way of doing things persons want to do
d) number and type of health conditions
e) number and type of interfering health conditions
f) mobility
g) use of assistive devices.

These seven variables include both global and functional measures and were designed to be a comprehensive assessment of health status. An inspection of data revealed no significant differences on the seven health status variables across geographical areas. Consequently, persons in each of the eight areas were grouped together for analytical purposes.

The majority of the respondents considered themselves to be in good or excellent health. In answer to the question, how would you rate your health, would you say it was excellent, good, fair or poor? sixteen percent (n=137) of the respondents said their health was excellent and 45% (n=383) rated their health as good. The percentage of respondents who considered their health to be fair or poor was 30% (n=251) and 9% (n=74) respectively.

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1 Refer to the Appendix for a list of other papers in this series.

Table 1 shows that the respondents' self-perception of health differed across age groups. Younger persons rated their health better than older persons. Almost two-thirds (n=321) of the persons between the ages of 62-74 rated their health good to excellent compared to one-half of the persons 85 and over. Seven percent (n=35) of the persons 62-74 rated their health poor compared to sixteen percent of persons 85+. Women tended to rate their health poorer than men. Five percent (n=19) of the men rated their health poor compared to eleven percent (n=51) of the women.

Over one-half (56%, n=474) of the respondents said that over a five year period their health remained the same. Ten percent (n=354) said their health improved and 34% (n=290) said it deteriorated. Table 2 shows that the younger respondents were more likely to say their health improved than the older respondents. Eleven percent (n=52) of persons aged 62-74 said their health improved compared to five percent (n=3) of the persons 85+. Persons aged 85 and over were more likely to report that their health deteriorated (47%, n=30), than persons 62-74 (32%, n=159). Women (35%, n=180) were also more likely than men (28%, n=99) to report a deterioration in health.

Despite the fact that the majority of respondents considered their health to be good or excellent, 61% (n=515) of the respondents reported that their health conditions interfered with their performance of day to day activities. Almost one-quarter (21%, n=174) of the respondents indicated that their health conditions hindered their performance of day to day activities "a great deal". No significant differences between men and women were found with respect to the extent of interference created by health conditions. However, differences among age groups did exist. Table 3 shows that the proportion of persons reporting interfering health conditions was greater among persons in the oldest age group (70%, n=44) than among persons in the youngest age group (56%, n=279).

The number of health conditions reported by the respondents ranged from zero through 18 with a mean of 3.5. Table 4 shows that seven percent (n=63) reported no conditions. Just less than one-third (29%, n=248) reported one or two conditions and 16% (n=139) reported seven or more conditions.

The type of conditions reported and the extent to which each condition interfered with the performance of day to day activities are shown on Tables 5 and 6. The five most prevalent conditions reported were arthritis/rheumatism, high blood pressure, circulation trouble, heart trouble and bad nerves. Over one-half (57%, n=475) of the respondents reported arthritis/rheumatism; forty-one percent (n=343) reported high blood pressure.

The mean number of conditions reported to interfere with day to day activities was 1.5. Twenty-nine percent (n=247) reported no interfering conditions; nineteen percent (n=162) reported one interfering condition; 26% (n=216) reported two to three conditions and 26% (n=218) reported four or more interfering conditions. The conditions that most interfered with their day to day activities were Parkinson's Disease, dizziness, depression, bad nerves and heart attacks.

The ability of the respondents to carry out activities of daily living (ADL) was measured with the use of selected items from the OARS Instrumental and Physical Activities of Daily Living (ADLS) scales.[1] Nine items were used. (See Exhibit A.) The respondents were read a list of the nine activities (using the telephone, shopping, meal preparation, housework, handling money, dressing, taking care of appearance, getting in and out of bed, bathing), and were asked to indicate if they could do the activity without help, with some help, or if they were unable to do the activity. If the respondents indicated they needed help, that they were unable to perform the activity, they were regarded as having a disability.

The number of disabilities reported ranged from zero through nine. Consistent with the finding that the majority of respondents perceived their health as good or excellent, it was not unexpected to find that the majority (69%, n=584) of respondents reported no disabilities. Fifteen percent (n=125) of the respondents reported one disability, six percent (n=52) had two disabilities and ten percent reported disabilities related to three or more ADLS.

Significant differences among age groups were found with respect to the number of disabilities reported. Table 7 shows that older respondents were more likely than the younger respondents to report disabilities. Persons without disabilities made up 78% (n=385) of persons aged 62-74, 62% (n=171) of persons aged 75-84 and 28% (n=18) of persons 85+. By contrast, persons with three or more disabilities comprised five percent (n=28) of persons 62-74, fourteen percent (n=38) of persons 75-84 and 28% (n=18) of persons 85 and over. Noteworthy is the finding that there were no significant differences in the number of disabilities reported by whether or not the respondents lived alone.

Women were more likely than men to report disabilities. Table 8 shows that 37% (n=173) of the women and 24% (n=85) of the men reported at least one disability. Thirteen percent (n=60) of the women compared to seven percent (n=24) of the men reported three or more disabilities.

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1 Refer to reference section for the reference to this scale.

The disabilities most frequently reported were in relation to shopping and housework. Table 9 shows that 22% (n=188) of the respondents had disabilities related to housework and fifteen percent (n=130) had disabilities related to shopping. Nine percent (n=75) of the respondents reported disabilities with activities of personal care including dressing, taking care of appearance, getting in and out of bed and bathing. Older respondents were more likely than younger respondents to have disabilities with activities of personal care. Four percent (n=9) of persons 62-74, thirteen percent (n=37) of persons 75-84 and thirty percent (n=85) of persons 85+ reported disabilities with at least one personal care activity. Women (12%, n=57) reported more disabilities related to personal care than men (5%, n=17).

The number of disabilities as well as the number of interfering conditions reported were significantly associated with the respondents' receipt of assistance. Table 10 shows that respondents who reported a larger number of disabilities also received assistance with a greater number of activities. Sixty-seven percent of persons who had three or more disabilities received assistance with five or more activities. Noteworthy is the finding that 20% of the persons who reported at least one disability received no assistance. Almost two-thirds (61%, n=45) of the individuals who reported disabilities with activities of personal care received assistance with five or more activities. One percent (n=8) of these individuals did not receive any assistance.

Table 11 depicts the relationship between the number of interfering conditions reported and the receipt of assistance. Of significance is the finding that close to two-thirds (65%, n=260) of the persons who had interfering health conditions received no assistance and over one-quarter (28%, n=60) of the respondents who four or more interfering conditions had no assistance.

The respondents who reported that arthritis/rheumatism, a stroke, a heart attack and/or a heart condition interfered with their day to day activities were more likely to be in receipt of assistance than respondents who did not have these conditions or who had these conditions and did not report them to be interfering. Sixty-one percent (n=203) of the respondents who had an interfering arthritic/rheumatic condition received assistance compared to 41% (n=209) of the persons who did not have the condition or an interfering condition. The corresponding percentages for persons with interfering heart conditions, strokes and heart attacks were respectively 69% and 44%, 87% and 47%; 70% and 47%.

It is noteworthy also that almost twice as many persons (66%, n=272) who received assistance with day to day activities lived with other persons than lived alone (34%, n=142). Refer to Table 12. The respondents who lived alone were more likely to be women and persons over the age of 74. Fifteen percent (n=52) of the men compared to 41% (n=200) of the women lived alone. Twenty-two percent (n=113) of persons under the age of 75 lived alone compared to 41% of persons 75 and over.

In light of the fact that the majority of respondents rated their health as good or excellent and that the majority of respondents did not report disabilities, it was not surprising to find that most of the respondents did not have mobility problems. Ninety-one percent (n=765) of the respondents indicated they could walk around an average block and 92% (n=706) of these individuals said they required no assistance. Almost all (99%) of the persons who said they could not walk around the block indicated that they could walk across a small room.

A small proportion of the respondents reported using assistive devices. The most frequently used devices were canes (14%, n=115) crutches (3%, n=16) and walkers (3%, n=15). Two percent (n=11) of the respondents used wheelchairs.

Twenty-one percent (n=175) of the respondents said that they required one or more assistive devices that they currently did not have. Some respondents had multiple requirements. Eleven percent (n=92) of the respondents required eye glasses; ten percent (n=86) required false teeth, and eight percent (n=65) required hearing aids.

3. THE RESPONDENTS' USE OF THE HEALTH CARE SYSTEM

In light of the respondents' health status, it was important to determine the respondents' use of the health care system. Specifically our concern was with the respondents' visits with family physicians and medical specialists, hospitalization and use of community agencies.

Fully 95% (n=807) of the respondents had family physicians. However, the proportion who reported having a physician differed across areas from a low of 92% (n=155) of the respondents in the rural areas to a high of 99% (n=146) of the respondents in Penetanguishene/Brockville.

The number of times the respondents were seen by their family physician during the twelve months prior to being interviewed ranged from zero to 98 with a mean of six. Table 13 shows that 92% (n=735) of the respondents had been seen by their physician at least once; 13% (n=102) were seen by their physician one time and close to eighty percent (79%, n=633) were seen by their physician two or more times.

The number of times the respondents had been seen by their family physician varied across age groups. During the year prior to being interviewed the proportion of respondents who had been seen by their family doctor ranged from a low of 92% (n=458) of the 62-74 age group to a high of 96% (n=59) of the 85+ group. Table 13a illustrates that with increasing age, the number of visits to family doctors increased. Four or more vists were made by 58% (n=284) of the respondents aged 62 to 74 compared to 70% (n=42) of the respondents aged 85+.

Women saw their physician a greater number of times than did men. Sixty-five percent (n=297) of the women compared to 56% (n=196) of the men saw their physician four or more times.

Ninety-one percent of the respondents said that they usually saw their physicians at his/her office. Four percent (n=28) were visited at home; four percent (n=29) went to a hopital clinic and one percent were seen in a doctor's office within their own building. Close to one-half (49%, n=394) of the respondents indicated that their doctor did home visits.

Forty percent (n=338) of the respondents indicated that they had been seen by a medical specialist during the twelve months prior to the interview. However, the percentage was not consistent across areas. In the largest urban centres (Toronto, Sault Ste. Marie/Windsor) 45% had been seen by a specialist. In contrast, the perentage who had been seen by a specialist in the rural areas and Penetanguishene/Brockville was 29% (n=47) and 36% (n=52) respectively.

The number of times the respondents had been seen by a medical specialist is depicted on Table 14. Almost two-thirds of the respondents had been seen by a specialist two times or less. Sixteen percent (n=52) had seen a specialist five or more times. No significant differences were found by age or sex with respect to whether the respondents were seen by a specialist or the number of times the specialists were seen.

The respondents who had been seen by a specialist were distinguished by the fact that they had a greater number of health conditions and a greater number of interfering health conditions than the respondents who had not been seen by a specialist. The respondents who had been seen by a medical specialist had a mean of five health conditions and 2.5 interfering conditions. By contrast, the respondents who had not been seen by a specialist had a mean of 3.5 health conditions and one interfering condition. Persons who were seen by a specialist rated their health lower than persons who had not been seen by a specialist. Forty-nine percent (n=161) of the persons who had been seen by a specialist rated their health fair to poor in contrast to 31% (n=157) of the persons who had not seen a specialist.

Nineteen percent (n=161) of the respondents had been hospitalized during the twelve months prior to the interview. The number of days spent in the hospital ranged from 1 to 180. Table 15 shows that forty-one percent (n=66) of the respondents had been hospitalized for a week or less. Twelve percent (n=20) were hospitalized for over a month. Increasing age was also associated with a greater likelihood of being hospitalized. Table 15a shows that one-quarter (n=16) of the 85+ group had been hospitalized compared to seventeen percent (n=86) of the group aged 62 to 74. It is noteworthy that the respondents in the 85+ age group spent a longer period of time in the hospital than the younger respondents. Hospitalization of eight or more days were common to fourteen percent (n=9) of the respondents aged 85+ compared to ten percent (n=50) of the persons aged 62 to 74.

The respondents who were hospitalized had a greater number of health conditions and a greater number of interfering health conditions than the respondents who were not hospitalized.

The mean number of health conditions reported by persons who were hospitalized was five compared to a mean of three for persons who had not been hospitalized. Persons who had been hospitalized had an average of three interfering conditions in contrast to an average of two interfering conditions for persons not hospitalized.

Persons who were not hospitalized rated their health better than those who were hospitalized. Table 16 shows that persons who rated their health good or excellent comprised 39% (n=61) of those who were hospitalized and 67% (n=45) of those who were not. By contrast, persons who rated their health fair or poor comprised 61% (n=95) of the persons hospitalized and 33% (n=224) of those who were not.

The respondents who had been hospitalized were more likely to receive assistance than the respondents who had not been hospitalized. Sixty percent (n=97) of the respondents who had been hospitalized were in receipt of assistance with day to day activities compared to 46% (n=316) of those who had not been hospitalized.

The number of times the respondents were admitted to the hospital ranged from one to twelve. Over two-thirds (68%, n=109) were admitted one time; 21% (n=33) were admitted two times. No significant differences across age groups were found in the number of hospital admissions. The reasons for the first hospitalization are indicated in Table 17. One quarter (n=39) of the respondents were hospitalized for surgery; fifteen percent (n=23) were hospitalized for heart related ailments and fourteen percent (n=21) were hospitalized for tests.

Just over ten percent (11%, n=93) of the respondents used community agencies including Visiting Nurses, Red Cross Homemakers, Home Care, Meals on Wheels, and Friendly Visiting. Table 16 shows the substantial variation in the use of the agencies. Nine percent (n=66) of the respondents received the assistance of Visiting Nurses; four percent (n=33) had a Red Cross homemaker; two percent (n=15) had Home Care and one percent (n=11) had Meals on Wheels. The use of these agencies varied across age groups. Table 18 shows that for the two most frequently used agencies: Visiting Nurses and Red Cross Homemakers, the older the respondents were, the more likely they were to use these agencies.

Persons who reported interfering conditions were more likely to use community agencies than persons who had no interfering conditions. Persons who had interfering conditions comprised 94% (n=61) of the persons who had the assistance of Visiting Nurses and 90% (n=30) of the persons who had help from a Red Cross Homemaker.

Persons who reported disabilities tended to use community agencies to a larger extent than persons without disabilities. Sixty-seven percent (n=66) of the persons who had the help of the VON and 67% (n=66) of persons who had help from Red Cross Homemakers reported disabilities.

Disabilities were reported by 29% (n=453) who had not used the agencies. It is noteworthy that 35% (n=34) of those who used Visiting Nurses and /or Red Cross Homemakers had disabilities related to personal care activities. By comparison, disabilities with personal care activities were common to 7% (n=116) of those who had not used these agencies.

4. CONCLUSION

The USCO survey was designed to examine the living situation of older community residents. One factor that undoubtedly has a significant bearing on the older persons' living situation is their health status. This report focuses upon the health of older persons across Ontario.

Most of the 846 persons interviewed considered themselves to be in relatively good health. The majority (61%) rated their health good to excellent. Although close to two-thirds of the respondents indicated that they had health conditions that interfered with their performance of day to day activities, 69% of the respondents reported that they were able to perform their day to day activities without assistance.

Nine percent of the respondents considered their health to be poor. Women and persons 85+ comprised the majority of these individuals and the majority of persons who indicated that their health had deteriorated over the previous five years.

As the respondents' age increased, so did the likelihood of reporting interfering health conditions, disabilities related to Activities of Daily Living and disabilities with personal care activities. Seventy percent of persons 85+ reported interfering health conditions compared to 56% of persons under the age of 74. Disabilities were reported by 72% of persons aged 85+ compared to 22% of persons aged 62-74. Disabilities with personal care activities were reported by 4% of persons 62-74 and thirty percent of persons 85+.

Women had more disabilities than did men. Thirteen percent of the women compared to seven percent of the men reported three or more disabilities. Disabilities with personal care activities were reported by twelve percent of the women compared to five percent of the men.

The findings suggest that when health status is examined on its own, women and persons aged 85 and over were in the poorest health. By the fact of having disabilities, particularly with activities of personal care, and by the fact of living alone, these two groups were vulnerable to losing their ability to remain in the community should adequate supports not be available.

TABLE 1: THE RESPONDENTS' SUBJECTIVE RATING OF HEALTH BY AGE GROUP (NUMBER AND PERCENTAGE)

RATING	62 - 74 (N)	62 - 74 %	75 - 84 (N)	75 - 84 %	85+ (N)	85+ %
Excellent	(85)	17	(43)	15	(6)	10
Good	(236)	48	(117)	43	(26)	41
Fair	(139)	28	(88)	32	(21)	33
Poor	(35)	7	(26)	10	(10)	16
TOTAL*	(495)	100	(274)	100	(63)	100

*4 Missing Observations

Tau = .073 $P < .01$

TABLE 2: THE RESPONDENTS' COMPARISON OF THEIR PRESENT HEALTH WITH FIVE YEARS PREVIOUS BY AGE (NUMBER AND PERCENTAGE)

	Age Group					
	62 - 74		75 - 84		85+	
	(N)	%	(N)	%	(N)	%
Better	(52)	11	(26)	10	(5)	7
About the Same	(284)	57	(154)	56	(29)	46
Worse	(159)	32	(94)	34	(30)	47
TOTAL*	(495)	100	(274)	100	(64)	100

*3 Missing Observations

Tau = .06 P < .05

TABLE 3: THE RESPONDENTS' EVALUATION OF THE EXTENT TO WHICH HEALTH IMPAIRS DAY TO DAY ACTIVITIES BY AGE GROUP (NUMBER AND PERCENTAGE)

EXTENT TO WHICH HEALTH IMPAIRS ACTIVITIES	62 - 74 (N)	%	75 - 84 (N)	%	85+ (N)	%
Not At All	(216)	44	(92)	34	(19)	30
A Little	(192)	39	(119)	43	(24)	38
A Great Deal	(87)	17	(63)	23	(20)	32
TOTAL*	(495)	100	(274)	100	(63)	100

*4 Missing Observations

Tau = .11 $P < .01$

TABLE 4: NUMBER OF HEALTH CONDITIONS REPORTED BY RESPONDENTS (NUMBER AND PERCENTAGE)

NUMBER OF HEALTH CONDITIONS	(N)	%
0	(63)	7
1-2	(248)	29
3-4	(253)	31
5-6	(143)	17
7+	(139)	16
TOTAL	(846)	100

TABLE 5: TYPE OF HEALTH CONDITIONS REPORTED BY RESPONDENTS (NUMBER AND PERCENTAGE)

	(N)	%
Arthritis/Rheumatism	(475)	57
High Blood Pressure	(343)	41
Circulation Trouble	(272)	32
Heart Trouble	(248)	30
Nerves	(209)	25
Depression	(166)	20
Dizziness	(160)	19
Stomach Disorder	(155)	19
Glaucoma/Cataracts	(154)	8
Varicose Veins	(137)	16
Emphysema	(115)	14
Urinary Disorder	(116)	14
Diabetes	(90)	11
Ulcers	(80)	10
Heart Attack	(77)	9
Thyroid	(63)	7
Cancer	(61)	7
Skin Disorder	(55)	6
Asthma	(54)	6
Stroke	(51)	6
Kidney	(47)	6
Anemia	(43)	5
Liver Disease	(16)	2
Tuberculosis	(15)	2
Speech Impediment	(14)	2
Polio	(8)	1
Parkinsons	(8)	1
Epilepsy	(6)	1
Multiple Sclerosis	(4)	1
Muscular Dystrophy	(1)	1

TABLE 6:

THE RESPONDENTS' REPORTS OF THE INTERFERENCE OF EACH HEALTH CONDITION IN THE PERFORMANCE OF DAY TO DAY ACTIVITIES

(NUMBER AND PERCENTAGE)

HEALTH CONDITION	EXTENT OF INTERFERENCE: A GREAT DEAL (N)	%	A LITTLE (N)	%	NOT AT ALL (N)	%	TOTAL (N)	%
Arthritis/ Rheumatism	(99)	12	(237)	28	(139)	60	(475)	100
High Blood Pressure	(27)	8	(134)	39	(182)	53	(343)	100
Circulation Trouble	(64)	24	(134)	49	(74)	27	(272)	100
Heart Trouble	(48)	19	(124)	50	(76)	31	(248)	100
Nerves	(50)	24	(113)	54	(46)	22	(209)	100
Depression	(43)	26	(91)	55	(32)	19	(166)	100
Dizziness	(25)	16	(109)	68	(26)	16	(160)	100
Stomach Disorder	(20)	13	(65)	42	(70)	45	(155)	100
Glaucoma/Cataracts	(37)	24	(64)	42	(53)	34	(154)	100
Varicose Veins	(12)	9	(62)	45	(63)	46	(137)	100
Emphysema	(23)	20	(62)	53	(30)	27	(115)	100
Urinary Disorder	(15)	13	(30)	26	(71)	61	(116)	100
Diabetes	(15)	18	(25)	27	(50)	55	(90)	100
Ulcers	(12)	15	(31)	39	(37)	46	(80)	100
Heart Attack	(25)	32	(35)	45	(17)	23	(77)	100
Thyroid	(3)	5	(11)	17	(49)	78	(63)	100
Cancer	(6)	10	(19)	31	(36)	59	(61)	100
Skin Disorder	(10)	18	(20)	36	(25)	46	(55)	100
Asthma	(14)	26	(26)	48	(14)	26	(54)	100
Stroke	(15)	29	(15)	29	(21)	42	(51)	100
Kidney	(9)	19	(17)	36	(21)	45	(47)	100
Anemia	(6)	14	(12)	28	(25)	58	(43)	100
Liver Disease	(2)	13	(5)	31	(9)	56	(16)	100
Tuberculosis	(1)	7	(1)	7	(13)	86	(15)	100
Speech Impediment	(2)	14	(5)	36	(7)	50	(14)	100
Polio	(1)	12	(3)	38	(4)	50	(8)	100
Parkinsons	(4)	50	(3)	38	(1)	12	(8)	100
Epilepsy	(0)	0	(1)	17	(5)	83	(6)	100
Multiple Sclerosis	(0)	0	(1)	25	(3)	75	(4)	100
Muscular Dystrophy	(0)	0	(0)	0	(1)	100	(1)	100
Cerebral Palsy	(0)	0	(0)	0	(1)	100	(1)	100

TABLE 7: NUMBER OF DISABILITIES REPORTED BY AGE (NUMBER AND PERCENTAGES)

NUMBER OF DISABILITIES	62 - 74 (N)	62 - 74 %	75 - 84 (N)	75 - 84 %	85+ (N)	85+ %
0	(385)	78	(171)	62	(18)	28
1	(62)	13	(41)	15	(20)	31
2	(20)	4	(24)	9	(8)	13
3+	(28)	5	(38)	14	(18)	28
TOTAL*	(495)	100	(274)	100	(64)	100

* 3 Missing Observations

Tau = .196 $p<.01$

TABLE 8: NUMBER OF DISABILITIES REPORTED BY SEX (NUMBER AND PERCENTAGE)

NUMBER OF DISABILITIES	MEN		WOMEN	
	(N)	%	(N)	%
0	(268)	76	(301)	63
1	(42)	12	(81)	17
2	(19)	5	(32)	7
3+	(24)	7	(60)	13
TOTAL*	(353)	100	(474)	100

Chi Square = 15.65 $P < .01$

*9 Missing Observations

TABLE 9:

THE ABILITY OF RESPONDENTS TO PERFORM ADLS
(NUMBER AND PERCENTAGE)

	ADLS																					
	GETTING IN & OUT OF BED		APPEARANCE		DRESSING		HANDLING MONEY		USING TELEPHONE		MEAL PREPARATION		BATHING		SHOPPING		HOUSEWORK	
	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%
Able to Perform	(833)	99	(832)	98	(832)	98	(788)	93	(785)	93	(778)	92	(774)	92	(713)	85	(655)	78
Unable to Perform	(13)	1	(14)	2	(14)	2	(56)	7	(58)	7	(64)	8	(72)	8	(130)	15	(188)	22
TOTAL*	(846)	100	(846)	100	(846)	100	(844)	100	(843)	100	(842)	100	(846)	100	(843)	100	(843)	100

*15 Missing Observations

TABLE 10: NUMBER OF DISABILITIES REPORTED BY NUMBER OF ACTIVITIES WITH WHICH ASSISTANCE WAS RECEIVED (NUMBER AND PERCENTAGE)

NUMBER OF ACTIVITIES WITH WHICH ASSISTANCE WAS RECEIVED	NUMBER OF DISABILITIES							
	0		1		2		3+	
	(N)	%	(N)	%	(N)	%	(N)	%
0	(378)	65	(34)	27	(13)	25	(6)	7
1	(110)	19	(31)	25	(5)	7	(8)	9
2-4	(88)	15	(48)	38	(17)	35	(14)	17
5+	(8)	1	(12)	10	(17)	33	(56)	67
TOTAL*	(584)	100	(125)	100	(52)	100	(84)	100

Tau = .36 P <.01

*1 Missing Observation

TABLE 11: NUMBER OF INTERFERING CONDITIONS REPORTED BY RESPONDENTS BY THE NUMBER OF ACTIVITIES WITH WHICH ASSISTANCE WAS RECEIVED (NUMBER AND PERCENTAGE)

NUMBER OF ACTIVITIES WITH WHICH ASSISTANCE WAS RECEIVED	NUMBER OF INTERFERING CONDITIONS							
	0		1		2-3		4+	
	(N)	%	(N)	%	(N)	%	(N)	%
0	(171)	69	(97)	60	(103)	48	(60)	28
1	(45)	18	(26)	16	(40)	19	(44)	20
2-4	(26)	10	(25)	15	(47)	21	(70)	32
5+	(7)	3	(14)	9	(26)	12	(46)	20
TOTAL*	(249)	100	(162)	100	(216)	100	(220)	100

Tau = .30 P< .01

*1 Missing Observation

TABLE 12: NUMBER OF ACTIVITIES WITH WHICH RESPONDENTS RECEIVED ASSISTANCE BY WHETHER THEY LIVED ALONE (NUMBER AND PERCENTAGE)

	NUMBER OF ACTIVITIES WITH WHICH ASSISTANCE WAS RECEIVED							
	0		1		2-4		5+	
	(N)	%	(N)	%	(N)	%	(N)	%
Lives Alone	(111)	26	(49)	32	(69)	41	(24)	26
Lives With Others	(320)	74	(104)	68	(99)	59	(69)	74
TOTAL*	(431)	100	(153)	100	(168)	100	(93)	100

Chi Square = 14.60 $P < .01$

*1 Missing Observation

TABLE 13: NUMBER OF TIMES RESPONDENTS HAD BEEN SEEN BY THEIR FAMILY DOCTOR OVER A TWELVE MONTH PERIOD (NUMBER AND PERCENTAGE)

NUMBER OF TIMES FAMILY DOCTOR WAS SEEN	(N)	%
0	(63)	8
1	(102)	13
2-3	(167)	21
4-9	(226)	28
10+	(240)	30
TOTAL*	(798)	100

*9 Missing Observations

TABLE 13a: AGE GROUP OF RESPONDENTS BY THE NUMBER OF TIMES THEY HAD BEEN SEEN BY THEIR FAMILY DOCTOR OVER A YEAR'S PERIOD (NUMBER AND PERCENTAGE)

NUMBER OF TIMES FAMILY DOCTOR WAS SEEN	Age Group					
	62 - 74		75 - 84		85+	
	(N)	%	(N)	%	(N)	%
Ø	(42)	8	(18)	6	(5)	8
1	(67)	13	(26)	9	(7)	1Ø
2-3	(1Ø7)	21	(52)	19	(8)	12
4+	(284)	58	(176)	66	(42)	7Ø
TOTAL*	(5ØØ)	1ØØ	(272)	1ØØ	(62)	1ØØ

Tau = .Ø6 P <.Ø5

*12 Missing Observations

TABLE 14: NUMBER OF TIMES RESPONDENTS HAD BEEN SEEN BY A MEDICAL SPECIALIST OVER A TWELVE MONTH PERIOD (NUMBER AND PERCENTAGE)

NUMBER OF TIMES MEDICAL SPECIALIST WAS SEEN	(N)	%
1	(127)	38
2	(85)	25
3-4	(70)	21
5+	(52)	16
TOTAL	(334)	100

TABLE 15: NUMBER OF DAYS RESPONDENTS SPENT IN THE HOSPITAL OVER A TWELVE MONTH PERIOD (NUMBER AND PERCENTAGE)

NUMBER OF DAYS IN HOSPITAL	(N)	%
1-7	(66)	41
8-14	(37)	23
15-30	(38)	24
31-180	(20)	12
TOTAL	(161)	100

TABLE 15A AGE GROUP OF RESPONDENTS BY NUMBER OF DAYS THEY SPENT IN THE HOSPITAL (NUMBER AND PERCENTAGE)

NUMBER OF DAYS SPENT IN HOSPITAL	AGE GROUP					
	62 - 74		75 - 84		85+	
	(N)	%	(N)	%	(N)	%
0	(416)	83	(216)	79	(48)	75
1-7	(36)	7	(23)	8	(7)	11
8+	(50)	10	(35)	13	(9)	14
TOTAL*	(502)	100	(274)	100	(64)	100

Tau = .06 $P < .05$

*6 Missing Observations

TABLE 16:

RESPONDENTS' SUBJECTIVE RATING OF HEALTH BY WHETHER THEY WERE HOSPITALIZED OVER A TWELVE MONTH PERIOD
(NUMBER AND PERCENTAGE)

RATING OF HEALTH	NOT HOSPITALIZED (N)	%	HOSPITALIZED (N)	%
Excellent	(126)	19	(9)	6
Good	(326)	48	(52)	33
Fair	(188)	28	(60)	38
Poor	(36)	5	(35)	23
TOTAL*	(676)	100	(156)	100

Chi Square = 75.82 $P < .01$

*14 Missing Observations

TABLE 17:

REASON FOR FIRST HOSPITALIZATION
OF RESPONDENTS
(NUMBER AND PERCENTAGE)

REASON	(N)	%
Surgery	(39)	25
Heart Related	(23)	15
Tests	(21)	14
Flu, Fever, Virus	(6)	3
Diabetes	(5)	3
High Blood Pressure	(5)	3
Prostate	(4)	3
Stroke	(4)	3
Fracture	(3)	2
Cancer	(3)	2
Missing	(42)	27
TOTAL*	(155)	100

*9 Missing Observations

TABLE 18: TYPE OF COMMUNITY AGENCIES USED BY RESPONDENTS (NUMBER AND PERCENTAGE)

COMMUNITY AGENCY	(N)	%
Visiting Nurses	(66)	8
Red Cross Homemaker	(33)	4
Home Care	(15)	2
Meals on Wheels	(11)	1
Friendly Visiting	(6)	1

TABLE 19: AGE GROUP OF RESPONDENTS USING COMMUNITY AGENCIES (NUMBER AND PERCENTAGE)

	Age Group					
Visiting Nurses	62 - 74 (N)	%	75 - 84 (N)	%	85+ (N)	%
Used	(21)	4	(33)	12	(11)	17
Did Not Use	(474)	96	(241)	88	(53)	83
TOTAL*	(495)	100	(274)	100	(64)	100

Chi Square = 34.09 P<.01

*3 Missing Observations

Red Cross Homemaker	62 - 74 (N)	%	75 - 84 (N)	%	85+ (N)	%
Used	(9)	2	(14)	5	(9)	14
Did Not Use	(485)	98	(260)	95	(55)	86
TOTAL*	(494)	100	(274)	100	(64)	100

Chi Square = 27.84 P<.01

* 4 Missing Observations

EXHIBIT "A"

OARS ADL QUESTIONS

1. CAN YOU USE THE TELEPHONE?

   (1) _____ Without help, including looking up numbers and dialing

   (2) _____ With some help (can answer phone or dial operator in an emergency, but need help in getting the number of dialing)

   (3) _____ Or are you completely unable to use the telephone?

2. CAN YOU GO SHOPPING FOR GROCERIES OR CLOTHES (ASSUMING YOU HAD TRANSPORTATION?)

   (1) _____ Without help (taking care of all shopping needs yourself, assuming you had transportation)

   (2) _____ With some help (need someone to go with you on all shopping trips)

   (3) _____ Completely unable to do any shopping

3. CAN YOU PREPARE YOUR OWN MEALS?

   (1) _____ Without help (plan and cook full meals by yourself)

   (2) _____ With some help (can prepare some things but unable to cook full meals yourself)

   (3) _____ Or are you completely unable to prepare any meals

4. CAN YOU DO YOUR HOUSEWORK?

   (1) _____ Without help (can scrub floors, etc.)

   (2) _____ With some help (can do light housework but need help with heavy work)

   (3) _____ Or are you completely unable to any housework

5. CAN YOU HANDLE YOUR OWN MONEY?

(1) _____ Without help (write checks, pay bills, etc.)

(2) _____ With some help (manage day-to-day buying but need help with managing your checkbook and paying your bills)

(3) _____ Or are you completely unable to handle money

6. CAN YOU DRESS AND UNDRESS YOURSELF?

(1) _____ Without help (able to pick out clothes, dress and undress yourself)

(2) _____ With some help

(3) _____ Or are you completely unable to dress and undress yourself

7. CAN YOU TAKE CARE OF YOUR OWN APPEARANCE, FOR EXAMPLE, COMBING YOUR HAIR AND (for men) SHAVING?

(1) _____ Without help

(2) _____ With some help

(3) _____ Or are you completely unable to maintain your appearance yourself

8. CAN YOU GET IN AND OUT OF BED?

(1) _____ Without any help or aids

(2) _____ With some help (either from a person or with the aid of some device)

(3) _____ Or are you totally dependent on someone else to lift you

9. CAN YOU TAKE A BATH OR SHOWER?

(1) _____ Without help

(2) _____ With some help (need help getting in and out of the tub)

(3) _____ Or are you completely unable to bathe yourself

APPENDIX

OTHER PAPERS IN USCO SERIES

The data which was gathered in the USCO survey provides base line information on the living situation of senior citizens who are not living in institutions in the province of Ontario. The volume and comprehensiveness of the data demanded separate analysis to allow for clear and complete information regarding the association between variables. A series of papers resulted with each paper having a particular emphasis.

Within the series, seven papers are issue oriented:

1. Elderly Residents in Ontario: Their Health Status and Use of the Health Care System.
2. Elderly Residents in Ontario: Social Contacts, Providers of Assistance and Requests for Additional Assistance.
3. Elderly Residents in Ontario: Their Participation as Volunteers and Their Interest in Volunteerism.
4. Elderly Residents in Ontario: Their Use of Transportation.
5. Elderly Residents in Ontario: Their Potential and Actual Use of Community Services.
6. Elderly Residents in Ontario: Their Current Housing Situation and Their Interest in Various Housing Options.
7. Elderly Residents in Ontario: Their Participation in Leisure Activities and The Barriers to Their Participation.

Six papers provide profiles of subgroups within the population surveyed:

8. Elderly Residents in Ontario: The Experience of Those Who are Childless.
9. Elderly Residents in Ontario: Age Differences With Particular Focus on Persons Aged 85+.
10. Elderly Residents in Ontario: The Experiences of Those Who Are Frail.
11. Elderly Residents in Ontario: Differences By Marital Status With Particular Focus on Those Who Are Single.

12. Elderly Residents in Ontario: Income Group Differences.

13. Elderly Residents in Ontario: Rural-Urban Differences.

The series also includes:

14. Elderly Residents in Ontario: Study Methodology: a paper outlining the background of the study and the research methods employed.

15. Elderly Residents in Ontario: An Overview: a paper summarizing the findings and content of the other fourteen papers in the series.

The intention is that each of the fifteen papers in the series can be studied on its own but, also that the complete series will offer continuity and comprehensive information in an accessible form.

Additional copies of this report, and others in the series, are available in person from the Ontario Government Bookstore, 880 Bay Street, Toronto, Ontario;

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APPENDIX

GLOSSARY

Chi Square: a test of statistical significance which is used to determine whether variables are independent or related and to also determine the extent to which the relationship is systematic and is not just occuring by chance.

Cleaning: a method by which the data is systematically examined to identify and eliminate inappropriate codes and wild punches (key punching errors).

Coding: a method of transforming information from the interview schedule into a numerical scheme for purposes of data analysis. The codes are subsequently key punched onto a computer card and fed into the computer for analysis.

Community Agency/ Service: all health, social, legal and financial services available in a community and organized under public or voluntary auspices. The services may operate with or without paid staff, and may or may not charge the user for services rendered.

Cross Tabulations: a joint frequency distribution of cases according to two or more classificatory variables. The cross tabulations allow for statistical analysis using a test of significance such as the chi-square test

Data: the information gathered in the study. In this project it consists of information gathered from the 846 interviews.

Dependent Variable: the outcome or determined condition in a relationship between two or more variables.

Disability: the requirement for assistance or the inability to carry out activities related to day to day living (i.e., housework, meal preparation.)

Frail: reports of three or more disabilities was the basis for defining a person as frail.

Frequencies: descriptive statistics used to organize data. The information is divided into variable categories or intervals and the number of cases in each category is known as the 'frequency' for that variable. The relative frequency is calculated by computing the percentage represented by the number of cases in each variable category.

Friendly Visiting: a community service wherein the individual receives personal visits from another person. This service may be organized under public or voluntary auspices and its purpose is to provide seniors with friendly contact.

G.I.S.: Guaranteed Income Supplement - a federal government supplement given to seniors to ensure that their income is at a specified level.

GAINS-A: Ontario provincial income supplement for senior citizens.

Health Care System: family physicians, specialists, hospitalizations, nursing home or rehabilitation centres.

Home Care: a program of visiting health care services to people in their own homes who meet eligibility criteria as established by the Ontario Ministry of Health.

Independent Variables: the determining condition in a relationship of two or more variables.

Institutional Settings: nursing homes, homes for the aged, chronic care units in general hospitals or chronic care hospitals, special care facilities and mental health facilities.

Instrument: the tool used to gather data; in this case the tool was an interview schedule.

Interfering Health Conditions: health conditions identified by a physician which the respondents consider to interfere with their day to day activities.

Interview Schedule: the questionnaire used by the interviewer to ask questions and record information.

Leisure Activity: an activity which a person participates in by choice and of their own volition; includes recreational activities, hobbies, volunteer work, etc.

Mean ($\bar{X}$): the sum of all the observations divided by the number of observations.

Missing Observations: instances in which the information is not available for a particular question.

Multiple Response: a procedure done on the computer with the use of SPSS whereby a analysis can be done of questions to which the respondents might legitimately make more than one reply.

OARS ADL Scale: specific questions developed for OARS (Older American Resources and Service Program of the Duke University Centre for the Study of Aging and Human Development). The ADL Scale measures the ability of respondents to carry out the activities of daily living (ADLS), (i.e., use of the telephone and meal preparation).

Old Age Security Data Base: a complete listing of all persons aged 62+ who receive the Old Age Security Pension and the Spouse's Allowance.

Paid Help: distinguished from a community service in that it is assistance received which is not organized under public auspices as a service. It is all other assistance for which a fee is paid.

Personal Care Activities: activities such as bathing, dressing and getting in and out of bed.

Pretest: the testing of a research instrument such as a questionnaire or interview schedule prior to actually administering it for a study. The purpose of a pretest is to see how the instrument actually works in the field. The extent to which the questions are understood and the ease with which the instrument is administered is examined.

Previously Married: individuals who were married but are not presently married due to being widowed, divorced or separated.

Random Sample: a process for sample selection in which every element in the population is given an equal chance of being picked.

Represenativeness: the degree to which the study sample represents the population at large. Specific characteristics such as sex and age can be compared to determine the representativeness.

S.D.: a statistic which measures the scatter of a set of data and indicates the extent to which the responses vary around the mean.

SPSS: Statistical Package for the Social Sciences is a system of computer programs for the purpose of data analysis.

Sample: part of the population at large, selected for study.

Sample Frame: the base from which a sample is drawn, i.e., list of names.

Significant Differences: determined through a statistical procedure to establish that the relationship between variables did not occur by chance.

Single: persons who have never been married or are not living common-law.

Social Contacts: visits with friends and family or in person.

Socio-Economic: characteristics frequently used to measure social status such as educational level or income.

Stratified Sample: a sample procedure whereby all individuals are divided into groups or categories (in the case of this study it was communities) and then an independent sample is selected within each group or stratum.)

Supportive Housing Arrangements: a housing arrangement in which some supportive services are available, such as meals, house cleaning.

Tau: Kendal's Tau: a statistic used to measure the association among ordinal data. It summarizes the relationship between variables.

Variable: refers to a particular characteristic of the sample being considered.

Volunteer: a person who gives his/her time to a particular cause or organization without pay.

REFERENCE

Maddox, George L. and Karasik, Robin B. eds. Planning Services for Older People Durham, N.C., Centre for the Study of Aging and Human Development, Duke University, 1975. (OARS Questionnaire)